

REMARKS

Claims 1 through 20 are pending in this application.

The Applicant appreciates the Examiner's indication of allowance concerning claims 11 through 20.

I. CLAIM REJECTIONS - 35 U.S.C. § 102

Claims 1-3, 5, 6-8, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohmae et al. (US 6,577,047). The Applicant respectfully traverses.

No claim is anticipated under 35 U.S.C. §102 (b) unless all of the elements are found in exactly the same situation and united in the same way in a single prior art reference. As mentioned in the **MPEP §2131**, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Every element must be literally present, arranged as in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (CAFC 1989). The identical invention must be shown in as complete detail as is contained in the patent claim. *Id.*, "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970), and MPEP 2143.03. "A claim is anticipated only if each and every

element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

In paper number 7, page 2, the Examiner used Ohmae *et al.* (US 6,577,047) to reject claims 1-3, 5, 6-8, and 10 under 35USC§102(e). Concerning Ohmae *et al.* (US 6,577,047), the Applicant would like to respectfully note to the Examiner that the present invention has a foreign priority date (December 4, 2000) before the earliest possible effective U.S. filing date of the Ohmae *et al.* (US 6,577,047) patent (December 21, 2000).

The Ohmae *et al.* (US 6,577,047) patent can be antedated by the Korean priority document of the present invention by filing a sworn English translation. Ohmae *et al.* (US 6,577,047) was filed on December 21, 2000 in the United States. The present invention was filed in the United States on December 3, 2001. However, the priority document of the present invention was filed in Korea on December 4, 2000 which antedates the U.S. filing of Ohmae *et al.* (US 6,577,047). Under 35 USC §119, the present application can rely on the foreign priority date of December 4, 2000 which predates the Ohmae *et al.* (US 6,577,047) filed on December 21, 2000 in the United States by filing a sworn English translation.

While the applicant does not admit that the cited reference is entitled to actual prior art status relative to the applicant’s invention, even assuming, *arguendo*, that it is, the claimed invention is patentable thereover for reasons given below.

The Examiner states that regarding claim 1, Ohmae discloses a tension mask assembly for a flat CRT comprising: a tension mask 13 comprising a plurality of strips separated from one another by a predetermined gap, real bridges 21 connecting adjacent strips to define slots 20, and first and second dummy bridges 28a, 28b (see Figs. 5A-5D) extending from adjacent strips toward each slot therebetween, said tension mask being installed to include a top surface of said tension mask facing a panel 2 forming a screen and being separated from said panel by a predetermined gap; a plurality of support members disposed at opposite sides of said tension mask; and a plurality of rigid members secured to opposite ends of said supporting members (see Col. 4, lines 40-50), a first etching boundary 32a being formed at an end of said first dummy bridge 28a near to the center of the tension mask being lower with respect to the screen than a second etching boundary 33a formed at an end of said second dummy bridge 28b near to the periphery of said tension mask (see Fig. 5C).

The Applicant respectfully traverses because not every element is literally present in Ohmae '047, arranged as in the claim. For example, in claim 1, Ohmae '047 does not disclose *a plurality of supporting members disposed at opposite sides of said tension mask to support said tension mask; and a plurality of rigid members secured to opposite ends of said supporting members to apply tension to said tension mask.* The Examiner points to col. 4, lines 40-50 of Ohmae '047 which mentions supports 11, elastic members 12 and the tension in the Y direction as seen figure 1 of Ohmae '047. If the supports 11 are correlated with the supporting members in claim 1, then the elastic members 12 would then have to correlate to the rigid members of the present invention since in Ohmae '047, the tension is applied in the Y direction as seen in figure 1 and mentioned in col. 4,

line 50 of Ohmae '047.

Therefore, the elastic members of Ohmae '047 do not disclose *rigid members* that *apply tension to said tension mask* as arranged in the claims.

Regarding claim 2, the Examiner states that Ohmae discloses the vertical center axis of an etched area (32a, 33a) at the upper end surfaces of said first and second dummy bridges being offset from the vertical center axis of an etched area (32b, 33b) at the lower end surfaces of said first and second dummy bridges toward the center of said tension mask to accommodate a deflected electron beam being blocked (see Figs. 5C and 5D, and Col. 9, lines 28-32 and 44-48).

However, figure 5C of Ohmae '047 is disclosing the vertical center axis being offset toward the periphery (direction d in Ohmae '047) rather than toward the center as disclosed in the claim 2 of the present invention. Looking at figure 5C of Ohmae '047, the shift ΔZ is in the periphery direction of the shadow mask.

Regarding claim 3, the Examiner stated that Ohmae discloses the amount of offset increasing from the center of said tension mask toward the periphery of said tension mask (see Col. 10, lines 23-30).

However, Col. 10, lines 23-30 states the following: "In other words, according to this

configuration, the inclined portion on the side of the tip portion 32c starts to incline from the tip portion 32c and inclines toward the central portion of the shadow mask 26 as it approaches the front side of the shadow mask 26. The inclined portion on the side of the tip portion 33c starts to incline from the tip portion 33c and inclines toward the peripheral side of the shadow mask 26 as it approaches the back side of the shadow mask 26.” This disclosure is only restating what is already shown in figure 5C which has for example the tip portion 32c inclining from the tip section which is 32c toward the central portion pointed by arrow “c” and similarly for tip portion 33c with respect to the front and back side of the shadow mask. The amount of offset is never stated as increasing from the center to the periphery as mentioned in the present invention.

Referring to claim 5, the Examiner states that Ohmae discloses an etched area at an upper end surface above the first etching boundary of said first dummy bridge being wider than an etched area at a lower surface therebelow, and an etched area 33b at a lower surface below the second etching boundary of said second dummy bridge being wider than an etch area 33a at an upper surface thereabove (see Fig. 5C).

However, looking at Figure 5C of Ohmae '047, the etched area at the upper end surface 32a above the first etch boundary is not wider than the etched area at the lower surface below. From the drawing itself, the width look identical in Ohmae '047 and the specification does not make any further disclosure.

Therefore, Ohmae '047 fails to disclose identically the limitations as arranged in claims of

the present invention.

II. REJECTION OF CLAIMS (35 U.S.C. § 103)

Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohmae et al. (US 6,577,047) in view of Shinoda (US 6,433,468). The Applicant respectfully traverses.

According to MPEP 706.02(j), the following establishes a *prima facie* case of obviousness under 35 U.S.C. §103:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art

and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20
USPQ2d 1438 (Fed. Cir. 1991).

As noted above, the present invention has a foreign priority date (December 4, 2000) before the earliest possible effective U.S. filing date of the Ohmae *et al.* (US 6,577,047) patent (December 21, 2000). Therefore, Ohmae *et al.* (US 6,577,047) should not be combined with Shinoda '468.

While the applicant does not admit that the cited reference is entitled to actual prior art status relative to the applicant's invention, even assuming, *arguendo*, that it is, the claimed invention is patentable thereover for reasons given below.

Regarding claims 4 and 9, the Examiner states that Ohmae does not disclose the limitation of "an etched area at the upper end surfaces of said first and second dummy bridges being wider than an etched area at the lower end surfaces of said first and second bridges". However, the Examiner argues that in the same field of endeavor, Shinoda discloses a shadow mask comprising a plurality of slits having an upper etched area end surface being wider than an etched area at a lower end surface with the purpose of suppressing the degradation of color purity caused by reflected electrons from an inner surface of a panel being further reflected by the upper area of the mask toward another phosphor different from a desired one (see Col. 2, lines 62-67, Col. 3, lines 1-3, and Col. 5, lines 19-30).

The combination of references, however, do not teach or suggest all of the claimed limitations. Looking at figure 2 and 3 of Shinoda '468, the etchings shown concern tape 6 which as shown in figure 2 lacks a dummy bridge structure. Therefore, Shinoda '468 is teaching about the etchings of the portions that are specifically not around the dummy bridges and therefore, should not be modified by the Ohmae '047 disclosure concerning dummy bridges. Shinoda '468 concerns only the slot area and not the dummy bridge area.

However, in paper number 7, pages 4-5, the Examiner argues that it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an etched area at the upper end surfaces of said first and second dummy bridges being wider than an etched area at the lower end surfaces of said first and second bridges in order to suppress the degradation of color purity caused by reflected electrons from an inner surface of a panel being further reflected by the upper area of the mask toward another phosphor different from a desired one.

The Examiner does note that Shinoda is silent regarding the mask having dummy bridges; however, the Examiner argues that the teachings of "providing an upper etched area end surface being wider than an etched area at a lower end surface" to suppress the degradation of color purity caused by reflected electrons from an inner surface of a panel being further reflected by the upper area of the mask toward another phosphor different from a desired one, apply to those portions of a mask that allow transmission of electron beam such as slots and dummy bridges gaps.

However, these objectives given by the Examiner from Shinoda '468 are directed to the specifics of Shinoda which concerns the portions without dummy bridges. Furthermore, the particular etchings shown in figure 3 of Shinoda may not be conducing to dummy bridges but to areas without dummy bridges.

Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability. *In re Dembiczak*, 175 F.3d 994, 50 USPQ.2d 1614 (Fed. Cir. 1999). The showing must be "clear and particular" without broad generalized conclusory statements. *Id.* There must be specific statements showing the scope of the suggestion, teaching, or motivation to combine the prior art references. *Id.* at 1000. There must be an explanation to what specific understanding or technical principle would have suggested the combination of references. *Id.* Respectfully, the motivation given by the examiner of "efficiency", is a broad generalized conclusory statement.

Just because Shinoda '468 mentions an objective to suppress the degradation of color purity caused by reflected electrons from an inner surface of a panel being further reflected by the upper area of the mask toward another phosphor different from a desired one, it then does not mean that one can apply to those portions of a mask that allow transmission of electron beam such as slots and dummy bridge gaps. This is, respectfully, a generalized conclusory statement that is being used to provide the reasoning to modify Shinoda '468 which clearly does not teach or suggest the limitation concerning the dummy bridge area but clearly the area without dummy bridges as shown in figures 2 and 3 of Shinoda '468.

Therefore, respectfully, Shinoda '468 should not be modified in order to accommodate a

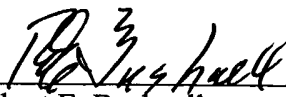
rejection that is using the teachings of the present invention rather than that of the references.

Therefore, as shown above, respectfully, the Examiner has failed to provide a *prima facie* case of obviousness and therefore the above mentioned claims should be allowable.

In view of the foregoing amendments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. If there are any questions, the examiner is asked to contact the applicant's attorney.

No fee is incurred by this Response. Should there be a deficiency in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,


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